DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

Medical

TULAREMIA

Agent Information:

Tularemia, a bacterial zoonosis, is caused by the bacterium *Francisella tularensis.* It is one of the most infectious pathogenic bacteria known, requiring inoculation or inhalation of as few as 10 organisms to cause disease. Tularemia is found naturally in animals, especially rodents and rabbits ("Rabbit Fever.") *Francisella tularensis* is considered to be a dangerous potential biological weapon due to its extreme infectivity, ease of dissemination, and substantial capacity to cause illness and death. Incubation period is typically 3-5 days, but can be from 1-14 days.

Signs and Symptoms:

Depending on exposure, symptoms are: skin ulcers, ocular inflammation, lymphadenopathy, oropharyngeal lesions, diarrhea or pneumonia. If the bacteria are inhaled, symptoms can include abrupt onset of fever, chills, headache, myalgias, arthralgias, dry cough and progressive weakness. Patients with pneumonia can develop chest pain, dyspnea, hemoptysis and respiratory failure.

Transmission:

It is not known to transmit person-to-person, though it is transmitted from skin lesions. Infection occurs from bites by infected arthropods, handling infectious animal tissues or fluids, directly contacting contaminated water, food or soil; and inhaling infected aerosols.

Decontamination:

Yes, if exposure is from aerosolization and presentation is immediate.

Isolation:

No.

Protective Measures:

Standard precautions.

Lab Samples Requested for Evaluation:

Clinical specimen for culture and/or PCR: blood, respiratory secretions (sputum, pharyngeal or bronchial washings) exudates or biopsy specimens. ONLY submit whole blood (purple top tube) for PCR. (A blood culture bottle must be drawn to confirm the PCR result.)

Prophylaxis:

Postexposure: Persons beginning treatment with streptomycin, gentamicin, doxycycline, or ciprofloxacin in the incubation period of tularemia and continuing treatment for 14 days might be protected against symptomatic infection.

- In a covert biological weapon attack, when the event is discovered after persons fall ill, the potentially exposed should be instructed to begin a fever watch, and to be prophylaxed if a fever occurs 14 days.

Treatment:

- Contained casualty setting: Where individual patients can be medically managed, streptomycin or gentamicins are the drugs of choice. Treatment with aminoglycosides should continue for 10 days. Since Tetracyclines and chloramphenicol carry a higher relapse rate, they should be given for at least 14 days. Both streptomycin and gentamicin are recommended as first-line treatment of children.
- Mass casualty setting: Doxycycline and ciprofloxacin are the preferred treatment choices for adults and children.

Reporting:

Immediately report suspect cases to Delaware's Division of Public Health, Epidemiology Branch: 1-888-295-5156 (24/7 coverage).

Contact Information:

Delaware's Division of Public Health, Epidemiology Branch: 1-888-295-5156. For additional information, view the CDC website: www.bt.cdc.gov.

24/7 Emergency Contact Number: 1-888-295-5156

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